Introduction to the Screening and Incidence Statistics for Fiscal Year 2002

The Massachusetts Department of Public Health's Bureau of Environmental Health Assessment (BEHA) Childhood Lead Poisoning Prevention Program (MACLPPP) has made enormous strides in reducing the risk of lead poisoning statewide. During the last 5 years in Massachusetts, the incidence rate for severe lead poisoning -- defined by the Centers for Disease Control and Prevention as greater than or equal to 25 ug/dL -- has dropped from 1.7 to 0.5 cases per 1,000 children screened, a decline of approximately 18% per year. Between 1998-2002, on average, 72% of Massachusetts children aged 9-48 months were screened annually, and in certain Massachusetts cities screening rates approached 90%.

The data in the screening and incidence tables below report blood lead testing performed for Massachusetts children during fiscal year 2001-02. Health care providers, physicians, and laboratories throughout Massachusetts sent more than 3,000 blood samples and laboratory tests to the State Laboratory Institute (SLI) in Jamaica Plain daily. These data are passed on the MACLPPP and compiled for surveillance purposes. They are available both on the web, and by request to public health professionals, researchers, and local citizens.

In these tables, data are provided for each of Massachusetts' 351 communities, as well as by Community Health Network Areas (CHNAs), regions, high and non high-risk areas. Reading columns in these tables from left to right, each community's CHNA is followed by 6 columns of screening data. The next 3 columns separate incident cases into categories of blood lead poisoning (15-19 ug/dL, 20-24 ug/dL, >=25 ug/dL) based on case management. Two totals of incident cases are given: >=15 ug/dL and >=20 ug/dL. The next column is the incidence rate for blood lead levels >= 20 ug/dL per 1,000 children screened. The percentage of housing units built before 1950 is included for reference on the right, because older housing is an established risk factor for exposure to lead paint. The "Key To Explain The Data Contained in Each of the Columns" gives more information on how to read these tables.

In Massachusetts, a high-risk community is defined as a town or city with an incidence rate equal to or higher than the state's rate, for cases >=20 ug/dL per 1,000 children screened. High risk rates are created by averaging the last 5 years of data, with adjustments for the percentage of housing built before 1950 and the percentage of low to moderate income families in each community. The high risk tables list those Massachusetts communities currently identified as high risk, alphabetically and by risk ranking. Notes at the bottom of the high risk tables explain exactly how the high risk adjustments were made. The 5-year average screening rate for each community is reported in the right hand column.

Using these tables, data from each community can be more fully understood and compared to other towns and cities. Comparisons can be drawn between regions and CHNAs, and between high risk and non high-risk areas. Trends can be constructed using statistics from previous years also found in the statistics section of the MACLPPP web page. For further information about these data, please refer to the Q&A in this section of the web page, or contact MACLPPP directly at www.mass.gov/dph/clppp.